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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,968	03/19/2004	Kyoung-sig Roh	Q80077	6471
23373	7590	08/06/2008	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			TRAN, MY CHAUT	
ART UNIT	PAPER NUMBER		2629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ADVISORY ACTION (CONT.)

Application and Claims Status

1. Applicant's amendment and response filed 07/10/2008 are acknowledged and entered.
2. Claims 1-14 were pending. Applicants have amended claims 1, 4, 7, and 8; and cancelled claims 9, 10, 12, and 13. No claims were added. Therefore, claims 1-8, 11, and 14 are currently pending.

Response to Arguments

3. All rejection(s) and/or objection(s) are maintained and the arguments are addressed below.
4. Applicant's arguments directed to the 102(e) rejection as being anticipated by Wilson et al. (US 6,982,697 B2; *filings date of 05/31/2002*) were considered but they are not persuasive for the following reasons.

[1] Applicant contends that "*Wilson fails to disclose, at least, an acceleration detection unit mounted in the pen-shaped body which detects respective axial direction accelerations, as recited in*" claims 1, 4, 7, and 8, and support this contention because "*Wilson merely discloses that the accelerometer provides x, y and z axes orientation signals, i.e., pitch, yaw and roll. (col. 3, lines 15-20; col. 8, lines 16-42)*"

[2] Applicant argues that "*Wilson fails to disclose, "a control unit which calculates absolute coordinates of the movement of the pen-shaped body from the tilt angle measured at the magnetic field detection unit and the acceleration measured at the acceleration detection unit,"*"

as recited in" claims 1, 7, and 8 since "*Wilson relies on video input from video cameras. (col. 3, lines 64-67; col. 8, lines 37-59; see 3D location of pointer FIG. 8 step 806 and col. 15, lines 57-60.)*"

[3] Applicant alleges that "*Wilson fails to disclose "wherein the control unit calculates a handwriting trajectory of a tip of the pen-shaped body based on the absolute coordinates of the movement of the pen-shaped body," as recited in*" claims 1, 4, 7, and 8.

This is not found persuasive for the following reasons:

[1] The examiner respectfully disagrees. It is the examiner's position that the reference of Wilson et al. does disclose the limitation of '*an acceleration detection unit mounted in the pen-shaped body which detects respective axial direction accelerations of the movement of the pen-shaped body*'. First, the examiner has established that the reference of Wilson et al. does teach the structural limitation of the instant claimed acceleration detection unit (i.e. '*an acceleration detection unit mounted in the pen-shaped body*'), and the functional limitation of the instant claimed acceleration detection unit (i.e. '*detects respective axial direction accelerations of the movement of the pen-shaped body*') as discussed in the previous Office Action mailed 05/12/2008 (see pg. 5, paragraph 6). Second, applicant's support, i.e. "*Wilson merely discloses that the accelerometer provides x, y and z axes orientation signals, i.e., pitch, yaw and roll. (col. 3, lines 15-20; col. 8, lines 16-42)*", is confusing and contradictory since the instant claimed '*acceleration detection unit*' also provide the signal of the detected axial direction accelerations (i.e. the '*x, y and z axes orientation signals*') as claimed in claim 3, i.e. the limitation of '*wherein the control unit controls the communication module to transmit the tilt angle detected at the magnetic field detection unit and the acceleration detected at the*

acceleration detection unit to the external computing device'. Hence, the reference of Wilson et al. does disclose the limitation of '*an acceleration detection unit mounted in the pen-shaped body which detects respective axial direction accelerations of the movement of the pen-shaped body*'. In addition, applicant's argument, i.e. '*rotating "about" an axis does not correlate to rotating in a axial direction*', does not rise to the level of factual evidence. See MPEP § 716.01(c): The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965).

[2] The examiner respectfully disagrees. It is the examiner's position that the reference of Wilson et al. does disclose the limitation of '*a control unit which calculates absolute coordinates of the movement of the pen-shaped body from the tilt angle measured at the magnetic field detection unit and the acceleration measured at the acceleration detection unit*'. First, Wilson et al. disclose that the microcontroller transmits via the RF transceiver to the host computer orientation messages that contained the calculated values of the input system orientation about the x, y, and z axes of the coordinate system base on the output x, y, and z axis signals of the accelerometer and magnetometer (see e.g. col. 4, lines 6- 43; col. 8, lines 16-37; col. 18, lines 5-50; figs. 11A and 11B). Second, the comprising language of instant claims 1, 4, 7, and 8 does not exclude the teachings of Wilson et al. wherein the video camera is an additional structural component of the Wilson et al. input system. See MPEP § 2111.03, which states:

The transitional term "comprising," which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.

Accordingly, the reference of Wilson et al. does disclose the limitation of '*a control unit which calculates absolute coordinates of the movement of the pen-shaped body from the tilt angle*

measured at the magnetic field detection unit and the acceleration measured at the acceleration detection unit'.

[3] The examiner respectfully disagrees. It is the examiner's position that the reference of Wilson et al. does disclose the limitation of '*the control unit calculates a handwriting trajectory of a tip of the pen-shaped body based on the absolute coordinates of the movement of the pen-shaped body*'. First, the process/functional limitation, i.e. '*calculates a handwriting trajectory of a tip of the pen-shaped body based on the absolute coordinates of the movement of the pen-shaped body*', does not impart any structural distinction between the instant claimed control unit and the microcontroller of Wilson et al., and as a result it is not given any patentable weight. See MPEP § 2114, which states as follows:

APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART
>While features of an apparatus may be recited either structurally or functionally, claims<
directed to >an< apparatus must be distinguished from the prior art in terms of structure
rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32
(Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not
defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue
were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-
13, 169 USPQ 226, 228-29 (CCPA 1971); < *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531
(CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-*
Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir.
1990) (emphasis in original).

**MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM
FROM THE PRIOR ART**

**A claim containing a "recitation with respect to the manner in which a claimed apparatus is
intended to be employed does not differentiate the claimed apparatus from a prior art
apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex
parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Int. 1987).**

Moreover as stated in the paragraph [2] above, the microcontroller of Wilson et al. performs the function of calculating the orientation of the input system from the measured values of the accelerometer and magnetometer. Second, the process/functional limitation, i.e. '*calculates a handwriting trajectory of a tip of the pen-shaped body based on the absolute coordinates of the*

movement of the pen-shaped body', is merely a mathematical algorithm that uses the calculated values of the movement of the pen-shaped body to extrapolate the trajectory of a tip of the pen-shaped body, i.e. converting one set of numbers to another set of numbers. These types of mathematical algorithm are considered non-statutory subject matter. See MPEP § 2106.02.

Therefore, the teachings of Wilson et al. do anticipate the device and method of the instant claims, and the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MY-CHAU T. TRAN whose telephone number is (571)272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MY-CHAU T. TRAN/
Primary Examiner, Art Unit 2629

August 8, 2008